

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims

Claim 1 (currently amended): An ultrasonographic equipment comprising:

an ultrasonic transducer unit in which ultrasonic transducer elements for scanning an ultrasonic beam are arranged in a state of an array;

a transducer unit oscillating motor for making the ultrasonic transducer unit perform oscillation scanning in the direction crossing the scanning direction of the ultrasonic beam;

an oscillation angle detector configured to detect~~detection means for detecting~~ an oscillation angle of the ultrasonic transducer unit and generating oscillation angle information;

an ultrasonic transmitter configured to excite~~transmission means for exciting~~ the ultrasonic transducer elements~~element~~ to form the ultrasonic beam;

an ultrasonic receiver configured to form~~receiving means for forming~~ the ultrasonic beam from an ultrasonic echo received by the ultrasonic transducer elements~~element~~ and converting the ultrasonic beam to an~~visible~~ image data array;

a three-dimensional image processor configured to receive~~processing means for receiving~~ data streams comprising intermittent image data arrays with~~and~~ corresponding oscillation angle information inserted at blanking times between the image data arrays, the three-

~~dimensional image processor further configured to form,~~
~~and forming~~ a three-dimensional image based on ~~the~~
~~oscillation angle detected by the oscillation angle~~
~~detection means and image data outputted from the~~
~~ultrasonic receiving means, wherein the oscillation angle~~
~~information comprises data inserted between the image data~~
~~arrays at blanking times of the data streams; and~~
an image display configured to display~~means for~~
~~displaying~~ the three-dimensional image.

Claim 2 (currently amended): An ultrasonographic
equipment comprising:

an ultrasonic transducer unit in which ultrasonic
transducer elements for scanning an ultrasonic beam are
arranged in a state of an array;

a transducer unit oscillating motor for making the
ultrasonic transducer unit perform oscillation scanning in
the direction crossing the scanning direction of the
ultrasonic beam;

an oscillation angle detector configured to
~~detect~~~~detection means for detecting~~ an oscillation angle
of the ultrasonic transducer unit and generating
oscillation angle information;

an ultrasonic transmitter configured to
~~excite~~~~transmission means for exciting~~ the ultrasonic
transducer elements~~element~~ to form the ultrasonic beam;

an ultrasonic receiver configured to form~~receiving~~
~~means for forming~~ the ultrasonic beam from an ultrasonic
echo received by the ultrasonic transducer elements~~element~~
and converting the ultrasonic beam to an~~invisible~~ image data
array;

an oscillation angle information adder configured to
~~add~~~~adding means for adding~~ the oscillation angle
information generated by the oscillation angle
~~detector~~~~detection means~~ into the image data array
outputted from the ultrasonic receiver to form data
streams~~receiving means~~, wherein the ~~image data comprises~~
data streams comprise intermittent image data arrays with
blanking times between the image data arrays, and the
oscillation angle information is data inserted at the
blanking times between the image data arrays by the
oscillation angle information ~~adding means~~adder, such that
the data streams comprise the intermittent image data
arrays with corresponding oscillation angle information
inserted at the blanking times between the image data
arrays;

a three-dimensional image processor configured to
receive the data streams and to form~~processing means for~~
~~receiving the image data arrays and the oscillation angle~~
~~information inserted between the image data arrays~~, and
~~forming~~ a three-dimensional image based on the image data
arrays and the corresponding~~inserted~~ oscillation angle
information outputted from the oscillation angle
information adder~~adding means~~; and

an image display configured to display~~means for~~
~~displaying~~ the three-dimensional image.

Claim 3 (currently amended): The ultrasonographic
equipment according to claim 1, wherein the three-
dimensional image processor~~processing means~~ forms a three-
dimensional image based on angle information obtained by
interpolating the oscillation angle information detected
by the oscillation angle detector~~detection means~~.

Claim 4 (canceled)

Claim 5 (currently amended): An ultrasonographic equipment comprising:

an ultrasonic transducer unit which two-dimensionally scans a fault plane of a test body, and is driven to be oscillated in the direction orthogonal to a scanned face of the two-dimensional scanning;

a scanning converter configured to receive data
~~stream~~~~conversion means for receiving image data~~
comprising intermittent image data arrays with
corresponding~~and further receiving~~ oscillation angle
information inserted at blanking times between~~as data~~
~~inserted between~~ the image data arrays, the scanning
converter further configured to record~~and for recording~~ a
receiving signal obtained by the two-dimensional scanning
by the ultrasonic transducer unit in a frame memory to
create two-dimensional image data, write~~writing~~ position
information in the oscillation direction of the ultrasonic
transducer unit in the frame memory, read~~reading~~ out the
two-dimensional image data and the position information,
and output~~outputting~~ the two-dimensional image data and
the position information; and

a three-dimensional image processor configured to
create~~processing means for creating~~ a three-dimensional
image from the two-dimensional image data of a plurality
of frames and the position information in the oscillation
direction which are sequentially outputted from the
scanning converter~~conversion means~~.

Claim 6 (currently amended): The ultrasonographic equipment according to claim 2, wherein the three-dimensional image processor~~processing means~~ forms a three-dimensional image based on angle information obtained by interpolating the oscillation angle information detected by the oscillation angle detector~~detection means~~.

Claims 7-8 (Canceled)